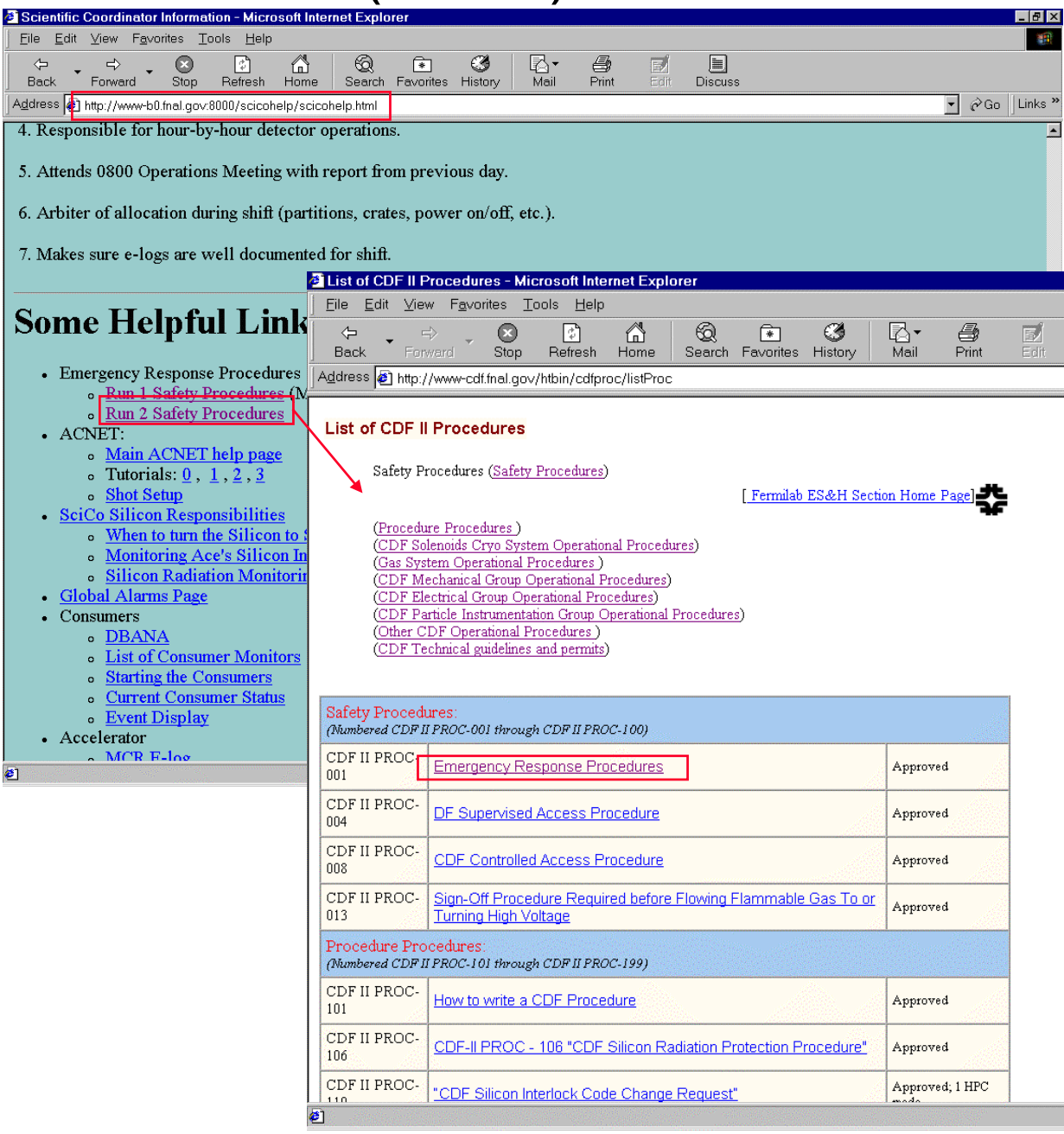
Emergency Response Procedures (ERPs)

- Where are the Emergency Response Procedures (ERPs)?



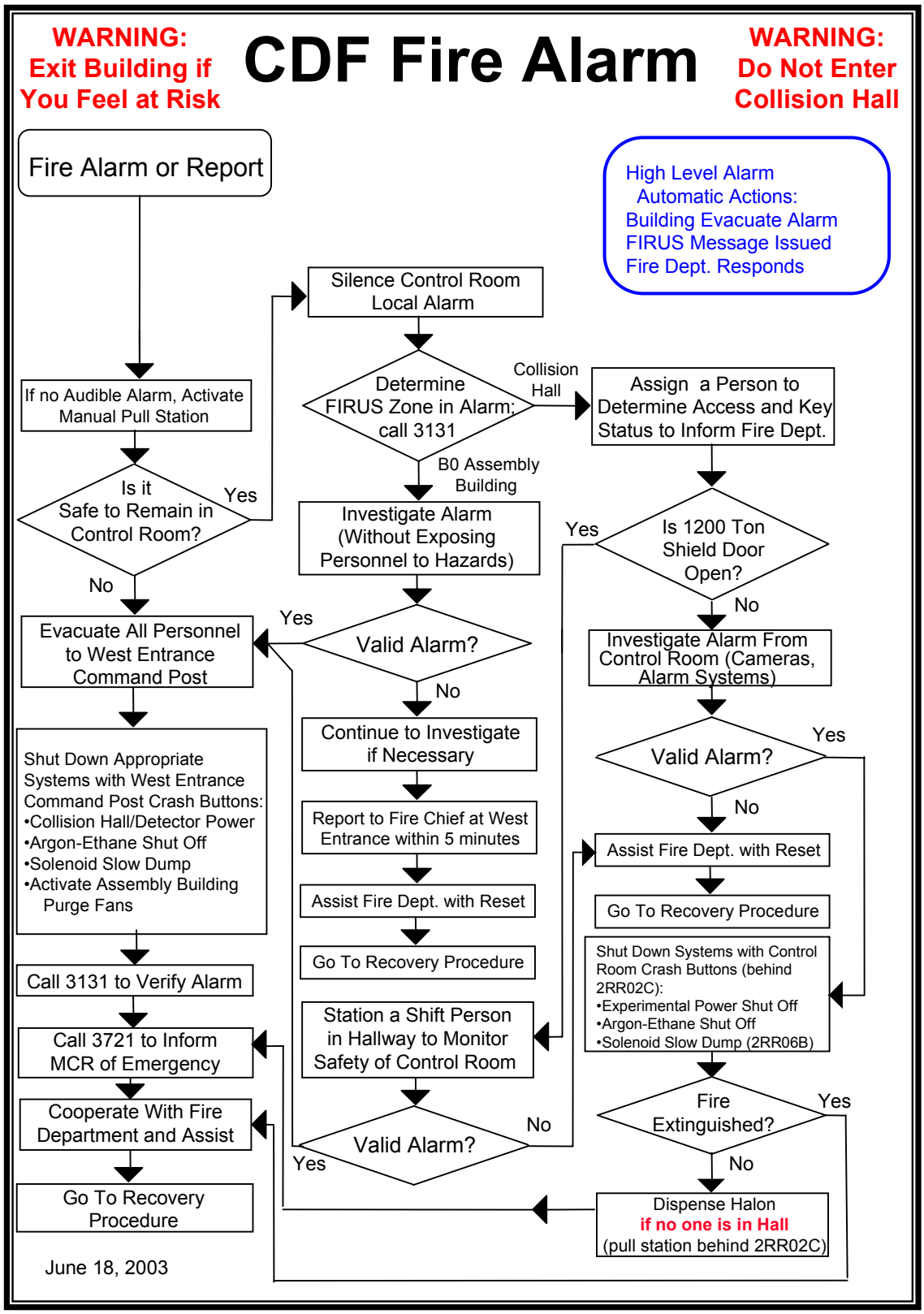
Emergency Response Procedures (ERPs)

- Flow charts of actions to be taken in emergency situations
- Most current version located on CDF web pages as shown on previous page
- Color keyed
  - Black - Procedure steps
  - Red - Important safety warnings
  - Green - Expert actions/suggestions
  - Blue - Additional information or automatic actions

Emergency Response Procedures (ERPs)

- **CDF Emergency Response Procedures:**
  - CDF Fire Alarm
  - CDF Oxygen Deficiency Hazard (ODH) Alarm
    - Assembly Building with 1200 T shielding door closed
    - Assembly Building or Collision Hall with 1200 T shielding door open
  - CDF Flammable Gas Alarm
    - Assembly Building
    - Collision Hall
    - Gas Shed (behind Assembly Building, not gas mixing shed on other side of berm)
    - COT Inerting
  - Severe Weather (Tornado) Alarm
  - Radiation Exposure Procedure
  - Spill Procedure
  - Recovery Procedure

Emergency Response Procedures (ERPs)

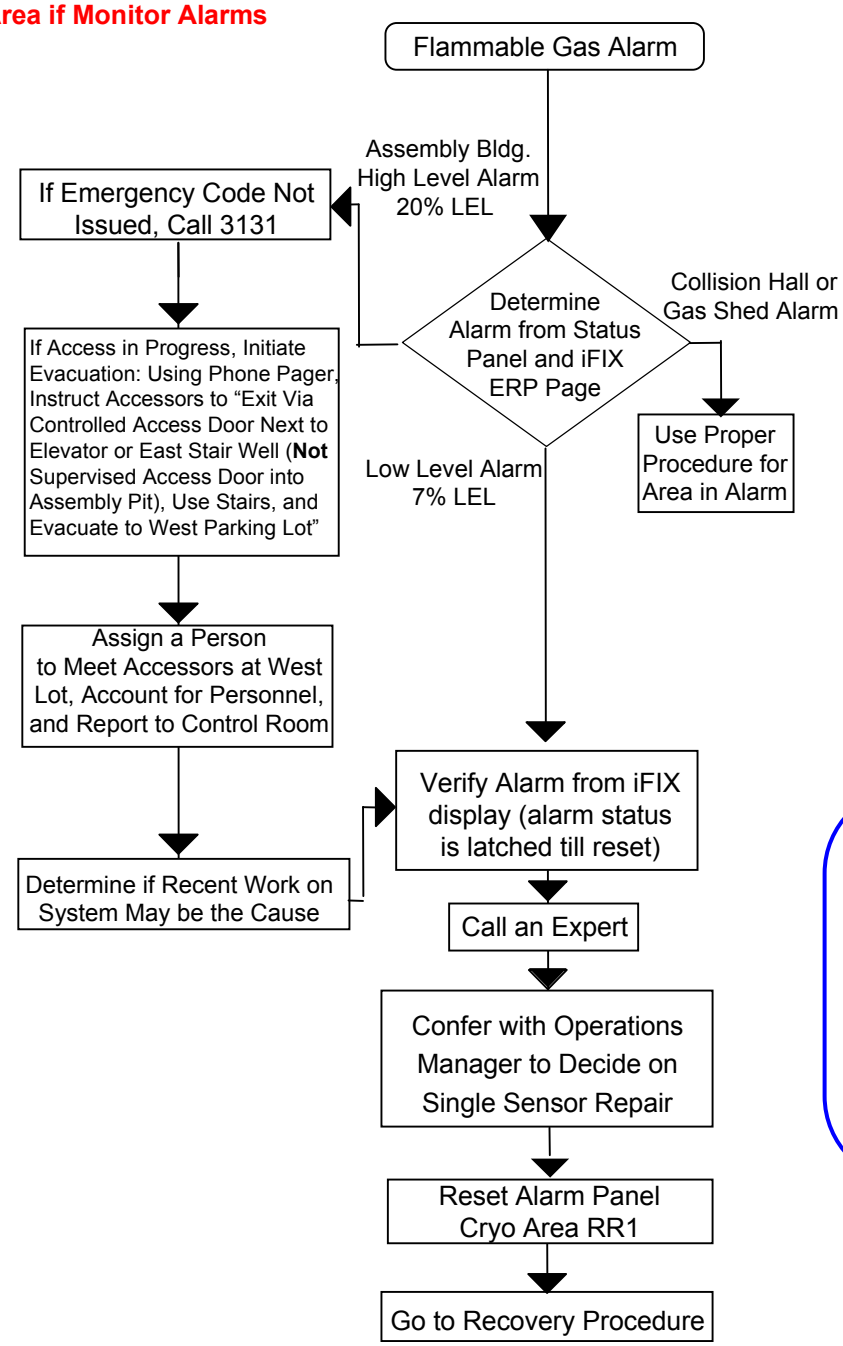


Emergency Response Procedures (ERPs)

WARNING:
Experts Investigating Must Wear Dual Function Gas Monitors and Leave Area if Monitor Alarms

CDF Flammable Gas
Assembly Building

WARNING:
Two Man Rule in Effect



Expert Investigators can do the following:

- Investigate Alarm Further Without Exposing Personnel to Hazards
- Determine Leak Validity and Severity at Zone Indicated Using a TIF-8800 (red) Flammable Gas Detector or by Investigating Nitrogen Purge System
- Close Manual Gas Supply Valve MV-2405 if High Level Alarm (Gas Shed Key Required)

High Level Alarm Automatic Actions:

Building Evacuate Alarm
FIRUS Message Issued
Fire Dept. Responds
Flammable Gas Shutoff
High Voltage Shutoff
400 Hz Power Shutoff
Detector 60 Hz Power Shutoff
Assembly Building Ventilation Purge Fans

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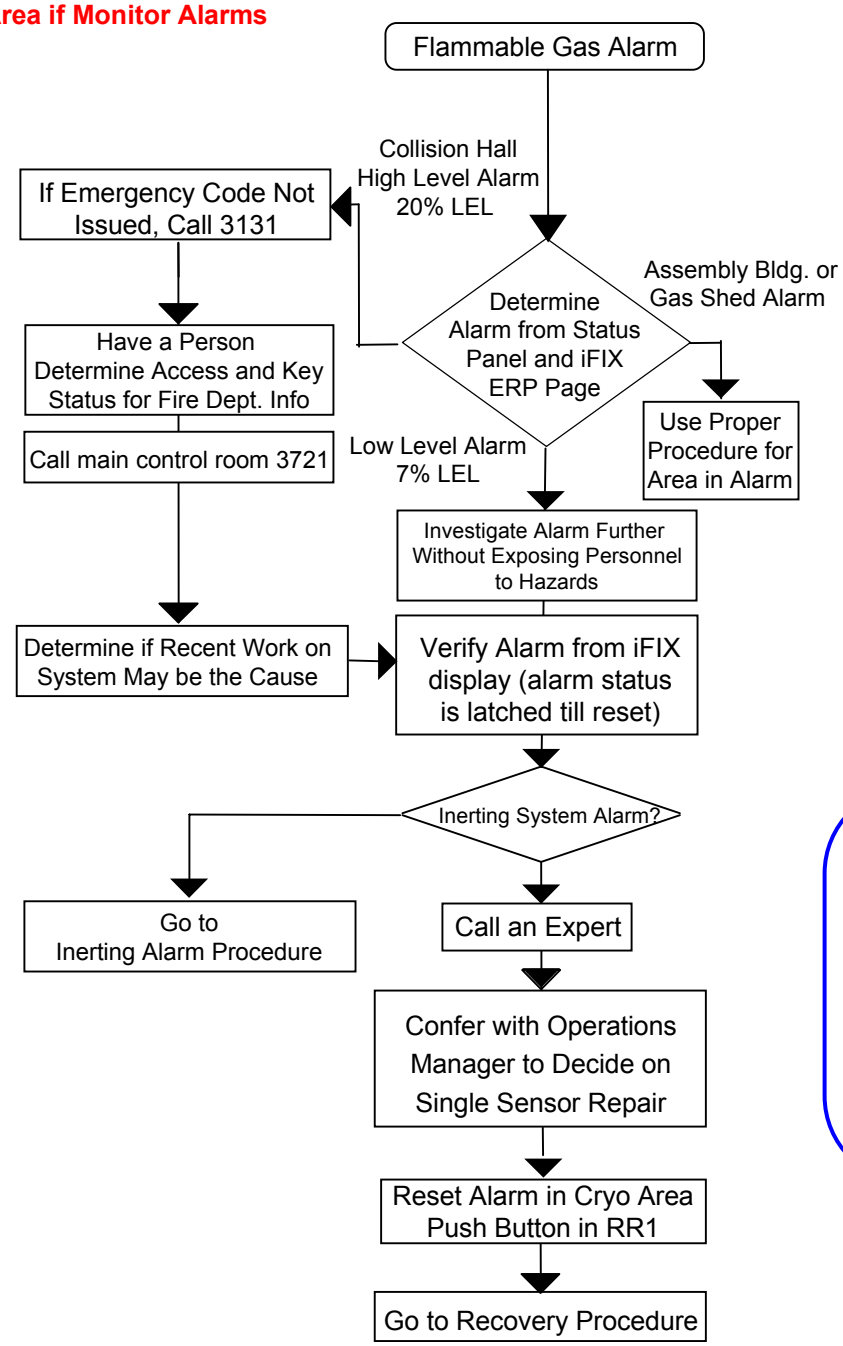
Emergency Response Procedures (ERPs)

WARNING:
Experts Investigating Must Wear Dual Function Gas Monitors and Leave Area if Monitor Alarms

CDF Flammable Gas Collision Hall

WARNING:
Two Man Rule in Effect



Expert Investigators can do the following:

- Determine Leak Validity and Severity at Zone Indicated Using a TIF-8800 (red) Flammable Gas Detector or by Investigating Nitrogen Purge System
- Close Manual Gas Supply Valve MV-2405 if High Level Alarm (Gas Shed Key Required)

High Level Alarm Automatic Actions:

Building Evacuate Alarm
FIRUS Message Issued
Fire Dept. Responds
Flammable Gas Shutoff
High Voltage Shutoff
400 Hz Power Shutoff
Detector 60 Hz Power Shutoff
Collision Hall Ventilation Purge Fans

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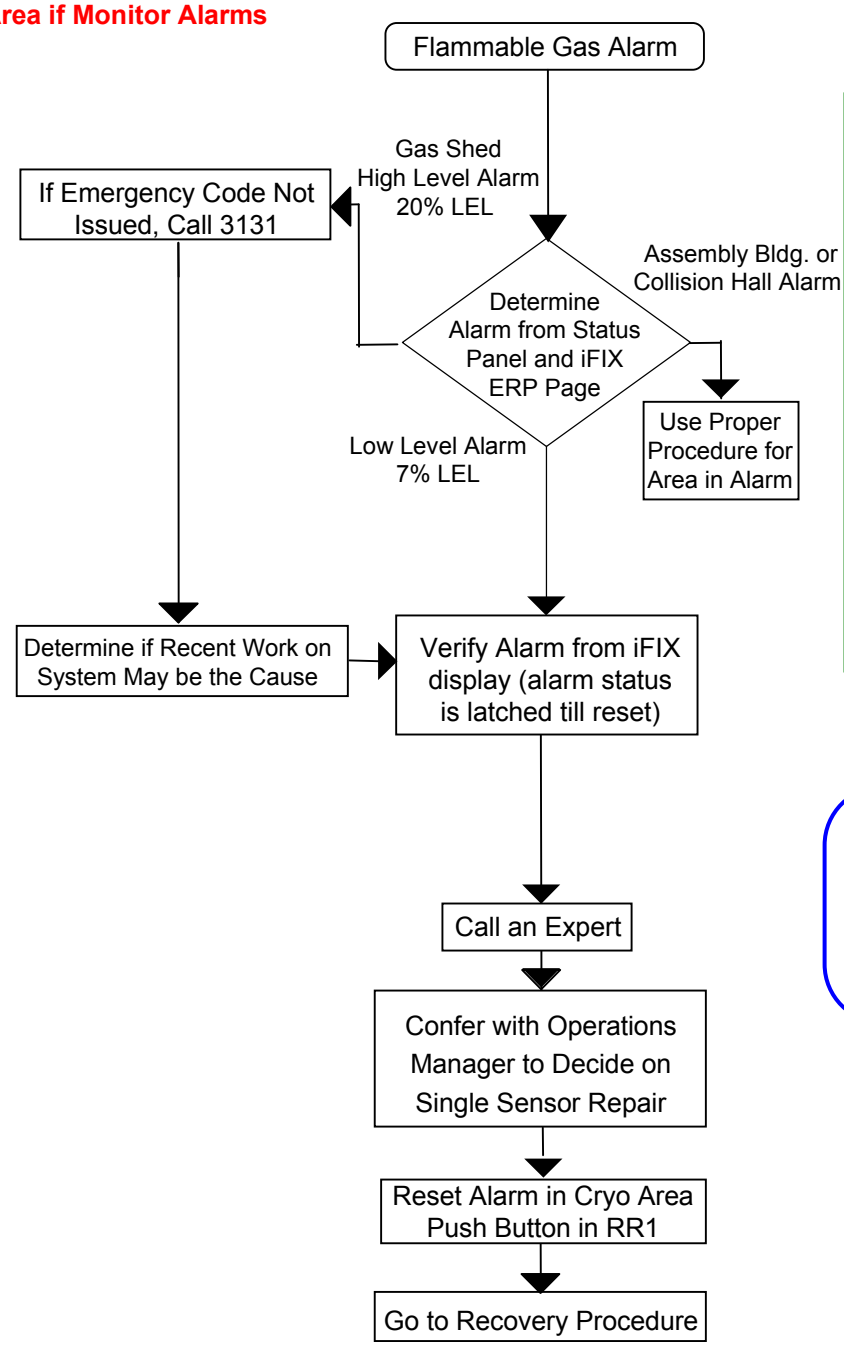
Emergency Response Procedures (ERPs)

WARNING:
Experts Investigating Must Wear Dual Function Gas Monitors and Leave Area if Monitor Alarms

CDF Flammable Gas
Gas Sheds

WARNING:
Two Man Rule in Effect



Expert Investigators can do the following:

- Determine Leak Validity and Severity at Zone Indicated Using a TIF-8800 (red) Flammable Gas Detector or by Investigating Nitrogen Purge System
- If Appropriate, Shut Down Gas System Compressor; Crash Button is outside East side next to Gas Shed Gate

High Level Alarm Automatic Actions:

FIRUS Message Issued
Fire Dept. Responds
Flammable Gas Shutoff

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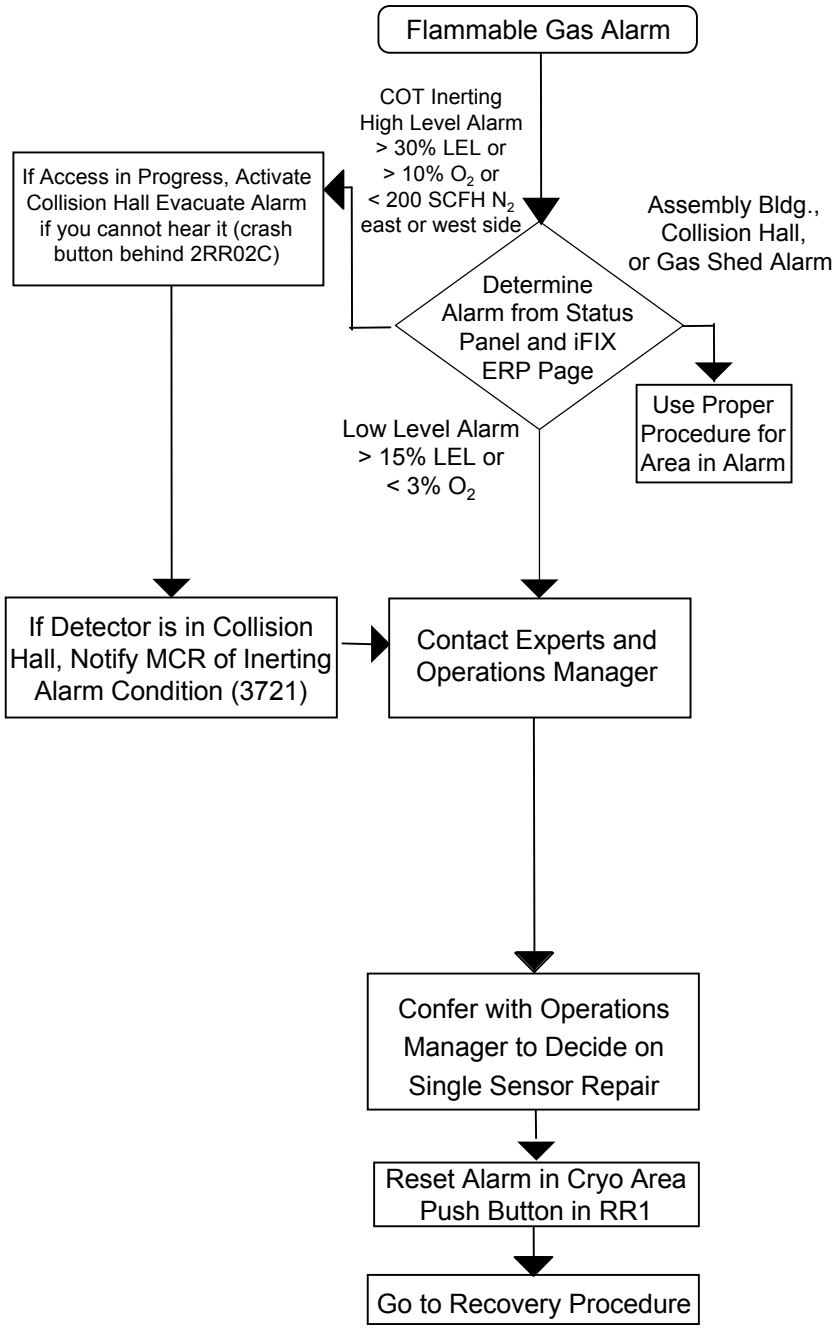
CDF Flammable Gas
COT Inerting Alarm



Expert Investigators can do the following:

- Check 730' Platform N_2 Flow Valid Alarm: Station 10 COTE & COTW will Alarm if either Dwyer gauge < 200 SCFH
- Check RRG04 to Verify Sample Draw Pump is Operating and O_2 Monitor Flow Rates Are:
  - Sample = 50 SCFH
  - Air Flow = 12 SCFH
- Verify N_2 Supply is Normal:
  - Tank #32 > 36 PSIG
  - Tank #18 > 40 PSIG

Shift Crew Can:

- Verify COT Inerting East or West Flow switches on iFIX Display Alarms Page
- Verify Flammable Gas Sensor Readings on iFIX Display:
  - Low Alarm ≥ 15% LEL
  - High Alarm ≥ 30% LEL

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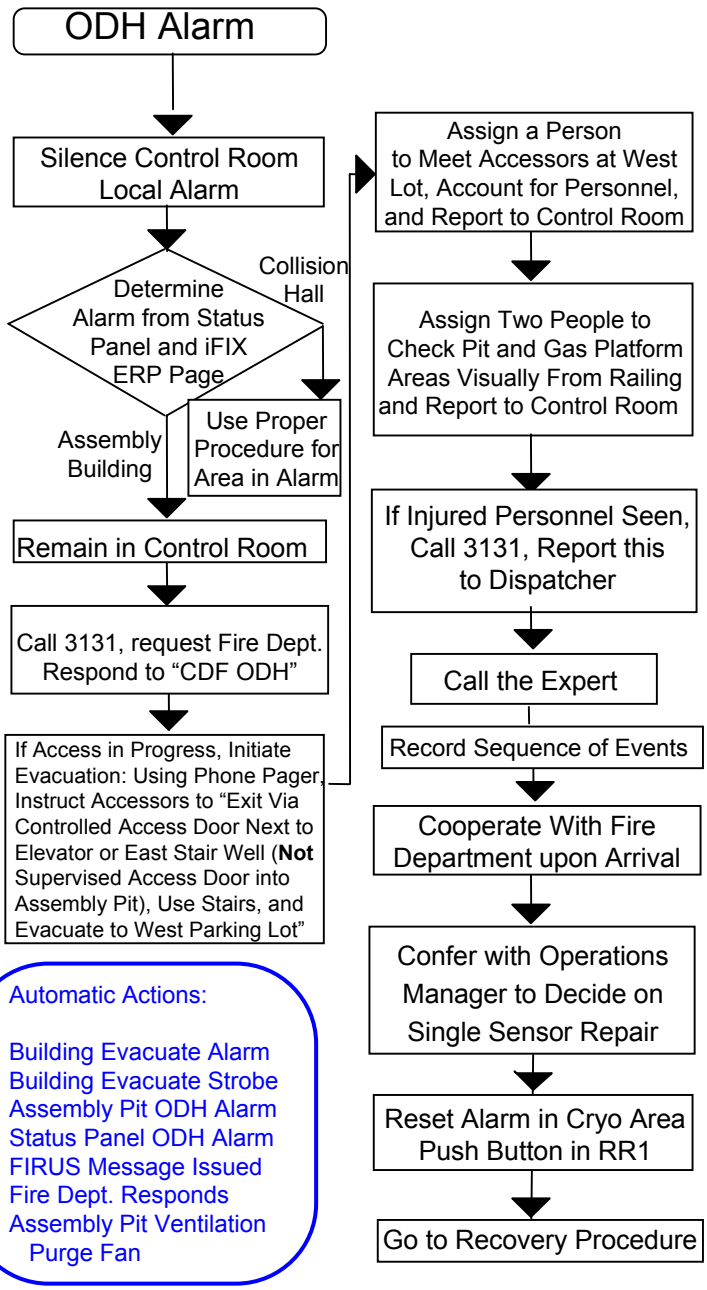
Emergency Response Procedures (ERPs)

WARNING: Do Not Enter Deep Pit

CDF ODH Alarm

Assembly Building with
1200 Ton Shield Door Closed



Automatic Actions:

- Building Evacuate Alarm
- Building Evacuate Strobe
- Assembly Pit ODH Alarm
- Status Panel ODH Alarm
- FIRUS Message Issued
- Fire Dept. Responds
- Assembly Pit Ventilation Purge Fan

Expert Investigators can do the following:

- Check Alarm at Cryo Area Rack #1
- Investigate Further:
  - Check for Other Alarms
  - Determine if Recent Changes are Cause
  - From iFIX, check PF1
  - Check Cryo System Readbacks

Alarm is Valid if any of the following are true:

- Vapor Cloud or Broken Line Seen
- More than One Sensor Indicates Latched Alarm
- Latched Sensor Non-Normal Reading Persists
- All Access Keys Cannot Be Accounted For (Unless Assembly Pit is Not Part of Access Area

If Valid Alarm is Only One Non-Normal Sensor and no other Confirming Evidence is Found, Alarm is Declared False

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Emergency Response Procedures (ERPs)

WARNING: Do Not Enter Deep Pit or Collision Hall

CDF ODH Alarm

Collision Hall or Assembly Building with 1200 Ton Shield Door Open

ODH Alarm

Silence Control Room Local Alarm

Determine Zone In Alarm from Status Panel and iFIX

Remain in Control Room

Call 3131, request Fire Dept. Respond to "CDF ODH"

Assign a Person to Determine Access and Key Status for Fire Dept. Info and meet Fire Dept. at West Command Post

Inform MCR- 3721 of ODH Alarm

Ask MCR to Investigate if Tevatron Could be Reason for ODH Condition

Assign a Person to Keep Phone Line Open to MCR

Automatic Actions:

Building Evacuate Alarm
Building Evacuate Strobe
Assembly Pit ODH Alarm
Status Panel ODH Alarm
FIRUS Message Issued
Fire Dept. Responds
Assembly Pit Ventilation Purge Fan

Assign a Person to Inspect Collision Hall with Cameras for Valid Alarm: Vapor Cloud, Broken Line, or Injured Personnel

If Shielding Door is Open, Assign Two People to Check Pit and Gas Platform Areas Visually From Railing and Report to Control Room

If Injured Personnel Seen, Call 3131, Report this to Dispatcher

Coordinate With Fire Department

Confer with Operations Manager to Decide on Single Sensor Repair

Record Sequence of Events

Reset Alarm in Cryo Area Push Button in RR1

Go to Recovery Procedure

Expert Investigators can do the following:

- Check Alarm at Cryo Area Rack #1
- Investigate Further:
  - Check for Other Alarms
  - Determine if Recent Changes are Cause
  - From iFIX, check PF1
  - Check Cryo System Readbacks

Alarm is Valid if any of the following are true:

- Vapor Cloud or Broken Line Seen
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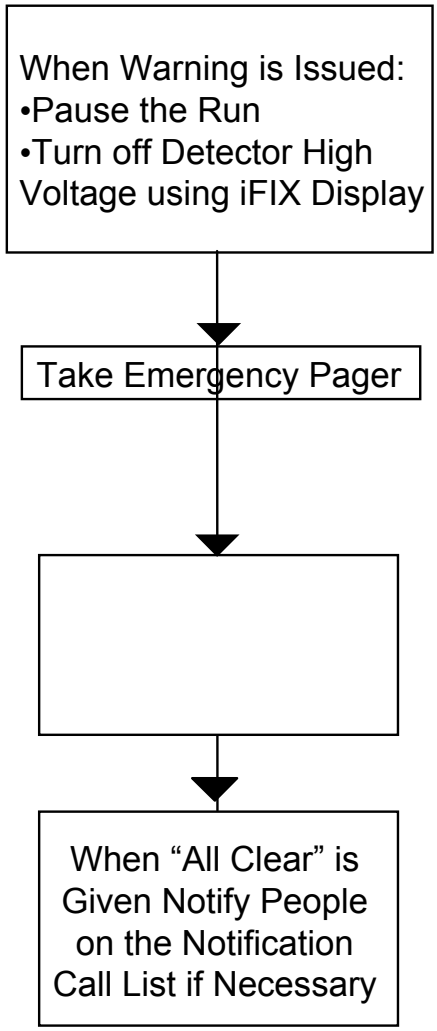
- Latched Sensor Non-Normal Reading Persists
- All Access Keys Cannot Be Accounted For (Unless Assembly Pit is Not Part of Access Area

If Valid Alarm is Only One Non-Normal Sensor and no other Confirming Evidence is Found, Alarm is Declared False

June 18, 2003

CDF Tornado/Severe Weather Alarm



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Emergency Response Procedures (ERPs)

CDF Radiation Exposure

Receive Report of Exposure

Advise the Detention of Anyone Possibly Exposed

Call 3131, Report Radiation Exposure

If Possible Dispatch a Person to Advise Others to Keep Out of the Area, but do not enter Area

Inform RSO and SSO of the Exposure

Notify Personnel on the PPD/Emergency Call List and CDF Operations Manager

Document Pertinent Operations Information for Exposure

Await instructions from the Division Head

Have MCR Disable Beam to Area if Appropriate

CDF Radiation Safety Officer (RSO):
Wayne Schmitt - 4407

CDF Senior Safety Officer (SSO):
Martha Heflin - 3511

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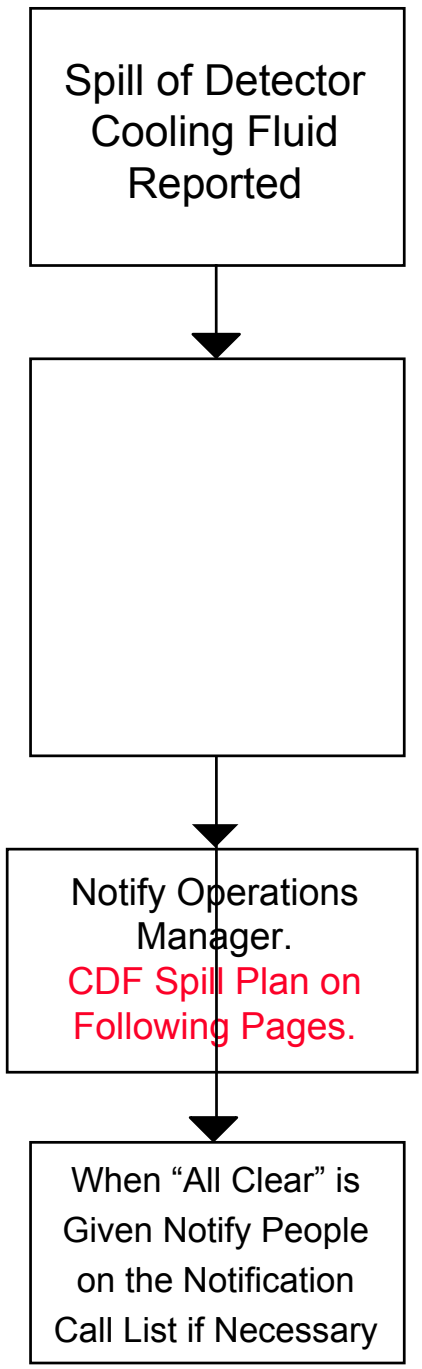
Emergency Response Procedures (ERPs)

CDF Spill Procedure



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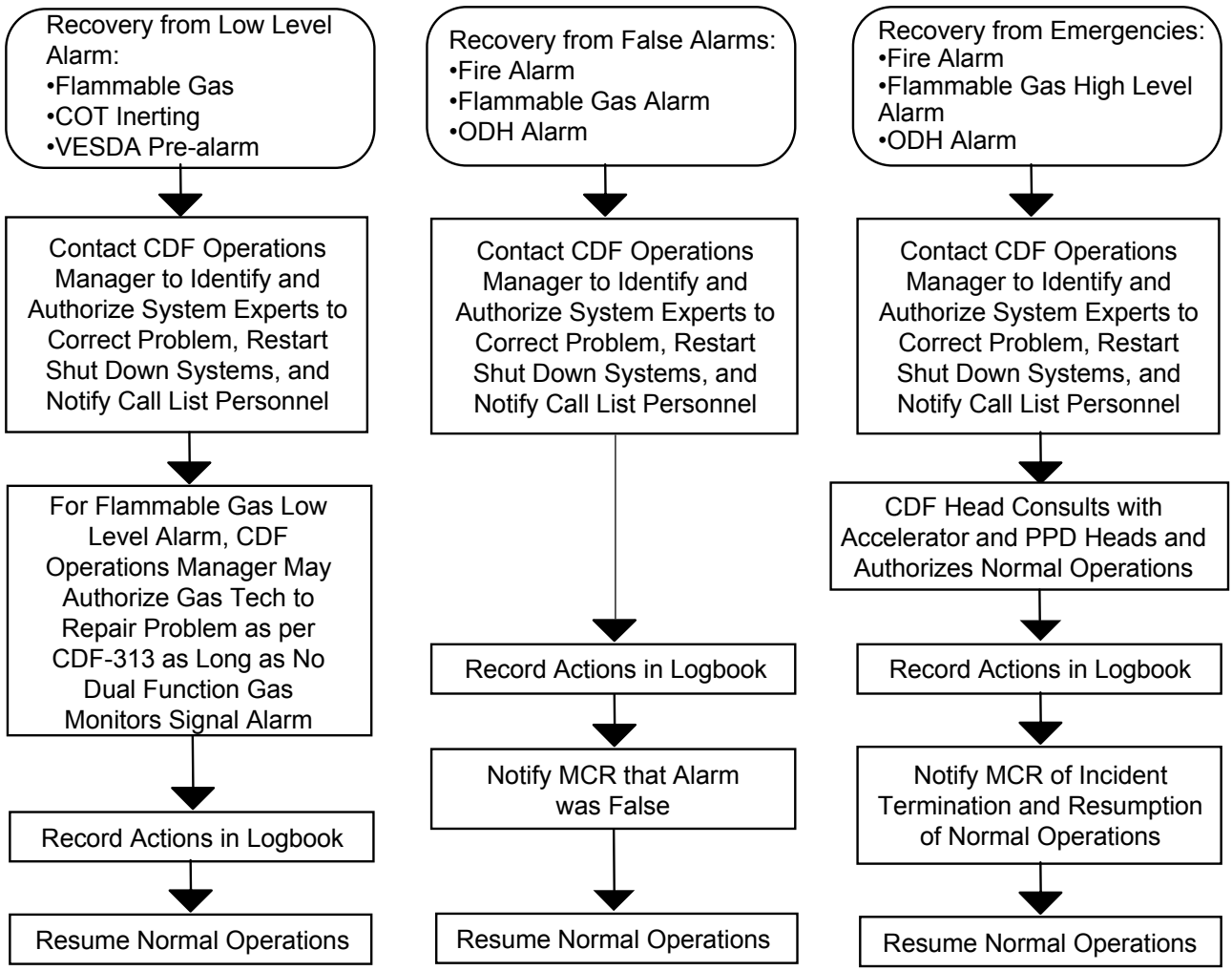
Emergency Response Procedures (ERPs)

Warning: Experts with MX241 or COM26 Monitors and Escape Packs should First Enter Pit After ODH False Alarms

CDF Recovery Procedure



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